IN THE CLAIMS

Please cancel Claims 1-45 and add the following claims:

46. (New) A method for obtaining lineage-committed dentritic cells exhibiting enhanced biological function comprising culturing lineage committed dendritic cells ex vivo under physiologically acceptable liquid culture conditions, said conditions including replacement of the liquid culture medium at a rate and for a time sufficient to obtain lineage committed dendritic cells with enhanced biological function.

47. (New) The method of claim 46, wherein the biological function enhanced in the dendritic cells comprises at least one member selected from the group consisting of secretion of one or more substances, cell-cell communication, receptor expression on the cell surface, antigen presentation, antigen processing, ability to home in *in vivo* to sites for function, the ability to stimulate T-cells, and the ability to function similar to naturally occurring tissue.

48. (New) The method of claim 46, wherein the liquid culture medium is replaced substantially continuously.

49. (New) The method of claim 46, wherein the liquid culture medium is replaced periodically.

50. (New) The method of claim 46, wherein the culture medium is replaced at a rate of at least 25% daily replacement for more than one day.

51. (New) The method of claim 46, wherein the culture medium is replaced at a rate

of at least 50% daily replacement for more than one day.

52. (New) The method of claim 46, wherein the culture medium is replaced at a rate of from 25 to 100% daily replacement for about $1x10^4$ to about $1 x10^7$ cells/ml in culture for more than one day.

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53. (New) The method of claim 46, wherein the lineage committed dendritic cells are antigen-primed dendritic cells.

54. (New) The method of claim 46, wherein the lineage committed dendritic cells are myeloid-derived dendritic cells.

55. (New) The method of claim 46, wherein the lineage committed dendritic cells are non-myeloid-derived dendritic cells.

56. (New) A method for obtaining lineage-committed human dentritic cells exhibiting enhanced biological function comprising culturing lineage committed dendritic cells ex vivo under physiologically acceptable liquid culture conditions, said conditions including replacement of the liquid culture medium at a rate and for a time sufficient to obtain lineage committed dendritic cells with enhanced biological function.

57. (New) The method of claim 56, wherein the biological function enhanced in the human dendritic cells comprises at least one member selected from the group consisting of secretion of substances, cell-cell communication, receptor expression on the cell surface,

antigen presentation, antigen processing, ability to home in in vivo to sites for function, the ability to stimulate T-cells, and the ability to function similar to naturally occurring tissue.

58. (New) The method of claim 56, wherein the liquid culture medium is replaced substantially continuously.

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59. (New) The method of claim 56, wherein the liquid culture medium is replaced periodically.

60. (New) The method of claim 56, wherein the culture medium is replaced at a rate of at least 25% daily replacement for more than one day.

61. (New) The method of claim 56, wherein the culture medium is replaced at a rate of at least 50% daily replacement for more than one day.

62. (New) The method of claim 56, wherein the culture medium is replaced at a rate of from 25 to 100% daily replacement for about $1x10^4$ to about $1 x10^7$ cells/ml in culture for more than one day.

63. (New) The method of claim 56, wherein the lineage-committed dendritic cells are antigen primed dendritic cells.

64. (New) The method of claim 56, wherein the lineage-committed dendritic cells are myeloid derived dendritic cells.

65. (New) The method of claim 56, wherein the lineage-committed dendritic cells are non- myeloid derived dendritic cells.

66. (New) A composition comprising lineage committed dendritic cells exhibiting enhanced biological function as compared to the biological function of the lineage committed dendritic cells cultured ex vivo under conditions which do not include replacement of the liquid culture medium during the culturing.

67. (New) The composition of claim 66, wherein the biological function enhanced in the isolated lineage committed dendritic cells comprises increased release of cytokines.

68. (New) The composition of claim 66, the lineage committed dendritic cells are cultured under conditions where the liquid culture medium is replaced at a rate of at least 25% daily replacement for more than one day.

69. (New) The composition of claim 66, the lineage committed dendritic cells are cultured under conditions where the liquid culture medium is replaced at a rate of at least 50% daily replacement for more than one day.

70. (New) The composition of claim 66, wherein the lineage committed dendritic cells are cultured under conditions where the liquid culture medium is replaced at a rate of from 25% to 100% daily replacement for about $1x10^4$ to about $1 x10^7$ cells/ml culture for more than one day.

71. (New) The composition of claim 66, wherein the dendritic cells are antigen primed dendritic cells.

72. (New) The composition of claim 66, wherein the dendritic cells are myeloid derived dendritic cells.

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73. (New) The composition of claim 66, wherein the dendritic cells are non-myeloid derived dendritic cells.

74. (New) A composition comprising lineage committed human dendritic cells exhibiting enhanced biological function as compared to the biological function of the lineage committed human dendritic cells cultured ex vivo under conditions which do not include replacement of the liquid culture medium during the culturing.

75. (New) The composition of claim 74, wherein the biological function enhanced in the isolated lineage committed human dendritic cells comprises increased release of cytokines.

76. (New) The composition of claim 74, the lineage committed human dendritic cells are cultured under conditions where the liquid culture medium is replaced at a rate of at least 25% daily replacement for more than one day.

77. (New) The composition of claim 74, the lineage committed human dendritic cells are cultured under conditions where the liquid culture medium is replaced at a rate of at least

50% daily replacement for more than one day.

78. (New) The composition of claim 74, wherein the lineage committed human dendritic cells are cultured under conditions where the liquid culture medium is replaced at a rate of from 25% to 100% daily replacement for about $1x10^4$ to about $1 x10^7$ cells/ml culture for more than one day.

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79. (New) The composition of claim 74, wherein the human dendritic cells are antigen primed dendritic cells.

80. (New) The composition of claim 74, wherein the human dendritic cells are myeloid derived dendritic cells.

81. (New) The composition of claim 74, wherein the human dendritic cells are non-myeloid derived dendritic cells.

82. (New) A composition comprising lineage committed dendritic cells with enhanced biological function which is obtained by the method of claim 46.

83. (New) A composition comprising lineage committed dendritic cells with enhanced biological function which is obtained by the method of claim 56.

84. (New) A method of treating a human patient in need of an infusion of lineage committed human dendritic cells, comprising administering to said patient a composition

according to claim 66.

85. (New) A method of treating a human patient in need of an infusion of lineage committed human dendritic cells, comprising administering to said patient a composition according to claim 74.

86. (New) A method of treating a human patient in need of an infusion of lineage committed human dendritic cells, comprising administering to said patient a composition according to claim 82.

87. (New) A method of treating a human patient in need of an infusion of lineage committed human dendritic cells, comprising administering to said patient a composition according to claim 83.